

# LETTER "A"



IN REPLY  
REFER TO:  
PN-6519  
ENV-6.00

## United States Department of the Interior

BUREAU OF RECLAMATION  
Pacific Northwest Region  
1150 North Curtis Road  
Boise, Idaho 83706-1234

JAN 09 1996

RECEIVED

JAN 09 1996

Ms. Nancy Wittpen  
Bonneville Power Administration  
905 NE 11th Avenue  
Portland OR 97232

ENERGY FACILITY SITE  
EVALUATION COUNCIL

Subject: Northwest Regional Power Facility Draft Environmental Impact  
Statement (EIS)

Dear Ms. Wittpen:

Enclosed are comments on the subject document provided by our Grand Coulee Power Office. By now, you should have received comments from the Department of the Interior that indicated no comments from Reclamation on Environmental Review 95/779 of the subject document. We apologize for the error and appreciate the time extension for providing comments to you.

In addition, as recently discussed with Lola Sept of my staff, we mistakenly requested that we be relieved of our status as cooperating agency for this EIS. While our concern and involvement regarding water supply has been put to rest, because the proposed project will be tying into our power grid at Grand Coulee Dam, we still have an interest in the project. Therefore, we do wish to remain as a cooperating agency. 1

If you have questions, please contact Lola Sept at (208) 378-5032.

Sincerely,

Robert C. Christensen  
Regional Environmental Officer

Enclosure

cc: Regional Environmental Officer, Attention: Hart Hodges, Office of the  
Secretary, Pacific Northwest Region, 500 NE Multnomah St. Suite 600,  
Portland OR 97232-2036

Bureau of Reclamation's  
Comments on the Northwest Regional Power Facility Draft EIS  
January 9, 1996

- Page 3-10. Tower Installation and Replacement--A statement needs to be added that "Towers will be required to be relocated and/or new towers installed for the relocation of the tie line at the 500 Kv Switchyard at the Grand Coulee Power Office." 2
- Page 3-13--Change paragraph title to: "Compensation Station and Tie Line Relocation Sites." 3
- Page 3-33. Transmission Facilities--Need to include the relocation of the tie line; revise first sentence. "Transmission line and relocation of tie line construction would. . . ." 4
- Page 3-101. Developed Land--Need to include tie line relocation; revise first sentence of first paragraph. "Figure 3-12 shows . . . where new ROW, switchyard expansion, and tie line relocation are proposed." 5
- Page 3-111. Developed Land--Need to include Douglas County; revise first sentence. "For the city of Grand Coulee, Grant County, and Douglas County. impacts. . . ." 6
- Page 3-134. Transmission Facilities--Need to include tie line relocation; add to first sentence. ". . . the newly proposed transmission line and proposed relocated tie line will not. . . ." 7
- Page 3-144. Transmission Facilities--Need to include tie line relocation; add this statement. "There should be no significant direct impact by the tie line relocation at the 500 Kv Switchyard at the Grand Coulee Power Office." 8

## **LETTER "A" RESPONSES**

- A-1 Comment noted. The Bureau of Reclamation will remain a Cooperating Agency for this project.
- A-2 The construction of a single-circuit 500-kV transmission line will not cause the relocation of the Tie Line at the Grand Coulee Switchyard. As a result Figure 2-9 (NRPF Transmission Route) has been revised. Please refer to Chapter 2 (Corrections and Modifications to the DEIS) of this document.
- A-3 See response to comment A-2.
- A-4 See response to comment A-2.
- A-5 See response to comment A-2.
- A-6 Comment noted. Suggested changes made to text. Please refer to Chapter 2 (Corrections and Modifications to the DEIS) of this document.
- A-7 See response to comment A-2.
- A-8 See response to comment A-2.

# LETTER "B"

## United States Department of the Interior



OFFICE OF THE SECRETARY  
Office of Environmental Policy and Compliance  
500 NE Multnomah Street, Suite 600  
Portland, Oregon 97232-2036

IN REPLY REFER TO:  
ER 95/779

# RECEIVED

January 9, 1996

JAN 11 1996

Nancy Wittpen  
Bonneville Power Administration  
905 NE 11th Avenue  
Portland OR 97232

## ENERGY FACILITY SITE EVALUATION COUNCIL

Dear Ms. Wittpen:

The Department of the Interior has reviewed the Draft Environmental Impact Statement (DEIS) for the Northwest Regional Power Facility (NRPF) and the following comments are provided for your use and consideration when preparing the Final Environmental Impact Statement (FEIS).

### GENERAL COMMENTS

#### Water Resources

The Bureau of Reclamation indicated that while they were originally a cooperating agency and an intervenor in the original project, they have withdrawn from both roles. Their concern was with loss of water potentially needed for salmon flows because Reclamation had been directed by the National Marine Fisheries Service, in their biological opinion, to acquire water to increase flows for salmon. The proposed well fields, located on Reclamation land, were in direct geologic connection with stored water from Lake Roosevelt and the proponent was requesting a new water right on a tributary of the Columbia River. However, since the proposed action has been changed to use the city of Creston's municipal water supply, there is now no need for a new water right nor use of the land adjacent to Lake Roosevelt. If you have questions concerning water resources, please contact Ms. Lola Sept, Environmental Specialist, Bureau of Reclamation's Pacific Northwest Regional Office at (208) 378-5032.

#### Recreation Resources

Due to the source's proximity to Coulee Dam National Recreation Area (CODA), The National Park Service (NPS) is concerned that there may be impacts to resources in the recreation area. The National Park Service Organic Act of 1916 (16 USC1, et seq.), mandates NPS to:

" . . . promote and regulate the use of . . . national parks . . . by such means and measures as conform to the fundamental purpose of the said parks, . . . which purpose is to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

As you may know, CODA is located on Lake Roosevelt about 6 kilometers north of the proposed NRPF and is categorized as a Class II Floor Area and lies within a Federal and State designated air quality attainment area. The NPS Statement for Management (1995) for CODA states: "Air quality within the National Recreation Area is generally good, except for the Kettle Falls area." Likewise, the NPS General Management Plan (1980) for CODA states: Natural resources will be managed to perpetuate the natural and rural character of the landscape within the recreation area wherever possible, to maintain an atmosphere of scenic tranquility as viewed from the lake and to maintain

environmental quality of air and water." The following comments and questions are based on the above management directives regarding the air quality and visibility within CODA and the Lake Roosevelt airshed and the NPS mandates in the Organic Act.

In order to carry out these mandates and management directives the following comments are provided on the DEIS.

In most cases, SO<sub>2</sub> and NO<sub>x</sub> do not reach concentrations high enough to injure vegetation in national parks. However, due to NRPF's proximity to the boundary of CODA, we are concerned that the facility's emissions could harm resources in CODA. Our concerns focus on the proposed SO<sub>2</sub> and NO<sub>x</sub> emissions and possible impacts on resources at CODA due to acid deposition. We ask that the applicant address potential acid deposition impacts at CODA, and we encourage you to take every opportunity to minimize emissions in the area to reduce the risk of injuring sensitive resources at CODA.

Because of our concerns about visibility and impacts on other resources in CODA, we request that the applicant perform the following modeling analyses: (1) plume impact and regional haze, and (2) total deposition. We look forward to reviewing the results of these analyses.

#### **SPECIFIC COMMENTS**

Page 1-5, Figures 1.1 and Page 2-3, Figure 2.2: For clarification these need to be turned to match the other figures, i.e., Figure 2-5, 'North', and a scale need to be added.

Page 1-7, Section 1.3.2 (No Action Alternative): Under consequences, add a statement that the associated environmental impacts, air quality, etc., would not occur.

Page 1-17, Section 1.4.2.3 (Recreation): [add] At certain times the scenic view on Lake Roosevelt may be impacting a portion of the approximately 1 million visitors to CODA (Per impacts modeled and listed for the class I airshed on the Spokane Indian Reservation on page 1-10).

Page 1-23, Section 1.5 (Areas of controversy and issues to be resolved): Although NPS did not request to become an intervenor in the adjudicative hearing process with EFSEC, we did comment on three other occasions regarding the NRPF. The correspondences were dated August 23, 1995, regarding the Northwest Regional Power Facility SEPA/NEPA EIS; October 13, 1995, regarding the NRPF (EFSEC) tentative determination on the PSD permit for air emissions in Creston, Washington; and October 26, 1995, regarding the NRPF PSD factsheet and related information. We would request that a statement be added to this section reflecting the concerns communicated in these correspondences. The statement could read "Visibility, dispositional, and acid rain impacts to CODA."

Page 2-3, Figure 2-1, "Spokane River Falls Lake": This should read "Spokane River Arm" and "Franklin Roosevelt Lake" should read "Franklin D. Roosevelt Lake"; or, our preference is "Lake Roosevelt." You could also identify "Coulee Dam National Recreation Area."

Page 2-11, Figure 2-5: From this figure and the discussions, it could not be determined why the proposed areas with no construction activities do not extend to the eastern, northern, and part of the western boundaries of the site--perhaps because of fencing? The figure, as presented, suggests potential sediment loading impacts in the steep canyon on the northeast.

Page 3-30, "Impacts on Visibility at Nearby Class I Areas": We would request that other significant areas (not class I) with visibility concerns be added to this section. Under the "perceptibility parameter, Delta E" calculated by VISCREEN on page 3-31, any impacts on the Spokane Reservation would also be perceptible at CODA (on Lake Roosevelt), a resource visited by over 1 million visitors annually, and on the Colville Indian Reservation.

Page 3-35, Section 3.1.4 (Water supply): There was no available data in the document to verify that the two (2) Creston city wells have a capacity of 1,030 gallons per minute (gpm). The well log for one well (drilled in 1981, 776 feet deep, finished in bedrock) was initially tested at less than 200 gpm, and the log for another well (could not determine if it's the second city well or an older well that was either abandoned or deepened) was tested at 300 gpm (reported on log). The nominal average pumping rate of 64 gpm for Creston indicates that the additional 55-77 gpm for the facility could easily be met. There may, however, be a problem with a peak rate of 467 gpm for Creston and 200 gpm for the facility. Creston wells are located essentially on a ground-water divide, with ground-water in this area generally flowing northward. Out crops of bedrock (e.g., Creston Butte) define the approximate boundary where ground-water flows south. Bedrock configuration suggests a limited recharge area for the wells. South of Creston, in the Sinking Creek area, water-levels are declining; levels are also declining all along the northern tier south of the Columbia River, partly due to pumpage and partly due to long-term dry conditions. Thus, it is important to identify the amount of time that the peak pumping rates would generally be expected to be maintained. Long periods of rates at 667 gpm may potentially impact shallow ground-water levels (there are shallow wells downstream) and spring discharge that supports the perennial streams north and east of the site.

Page 3-37, Section 3.1.5 (Surface Water): Regarding the stormwater retention pond: Basalts will accept a reasonable amount of recharge. Thus, for filtration, fine-grained sediments, such as the onsite loess, should be considered as a natural lining in the pond.

Page 3-37, Section 3.1.5, (Water-quality/ground-water): The water quality of Creston's water-supply is known; all public supply wells are tested. This data should be included in the FEIS. Generalized locations of monitoring wells should be shown so as to assess reasonableness of the network. The stormwater retention pond will not recharge ground water in the Sinking Creek basin but will recharge water moving northward. This water may potentially reach several shallow wells and perhaps deeper wells because this area, being a ground-water divide, has large downward vertical gradients and wells are not cased. Thus, the recharging pond water, if carrying contaminants, may locally have an impact on drinking water withdrawals.

Page 3-55, "Bald Eagle": There are roosting sites and an active bald eagle nest (1995) within 8 kilometers of the proposed NRPF.

Page 3-93, paragraph 3, last sentence Change this to read: "The entire Lake Roosevelt is managed for recreational use."

Page 3-120, Section 3.2.4.1 (Existing Conditions): [add] "On clear days a portion of the North Cascades, approximately 160 kilometers to the west, can be observed from Highway 2 traveling from Creston to Wilbur, Washington."

Page 3-122, Section 3.2.4.2 (Impacts): As mentioned at the beginning of this correspondence, the view in and around Lake Roosevelt is of paramount importance to CODA. Impacts of the visible plume to Lake Roosevelt and the surrounding areas, especially the Spokane Reservation, should be identified. If you have questions concerning recreational resources contact Scott Hebner, Coulee Dam National Recreation Area at (509) 725-2715.

We have appreciated the opportunity to comment.

Sincerely,

  
Charles Polityka  
Regional Environmental Officer

## **LETTER "B" RESPONSES**

- B-1 See Supplemental Letter "B" Responses.
- B-2 See Supplemental Letter "B" Responses.
- B-3 Comment noted. Suggested changes made to figure. Please refer to Chapter 2 (Corrections and Modifications to the DEIS) of this document.
- B-4 Comment noted. However, Section 1.3.2 (No Action Alternative) already states that the No Action Alternative would avoid the environmental impacts associated with these actions (i.e., construction and operation of the NRPF, transmission facilities, and natural gas pipeline).
- B-5 Comment noted. However, the impacts upon visibility were derived from the conservative assumptions. Some impact may be visible under proper lighting situations if one were looking toward the plant site and visibility was not obstructed by land forms. If one knew where to look, a slight distortion might be detectable. Most of the recreation on or along the rivers occurs at locations where hills will obstruct this view. The impact, if it occurs, should not be noticeable to recreational visitors. The impact to visibility is only a possibility, and, if it occurs, it should not be significant. In addition, see Supplemental Letter "B" Responses.
- B-6 Comment noted. Changes made to text. Please refer to Chapter 2 (Corrections and Modifications to the DEIS) of this document.
- B-7 Comment noted. Suggested changes made to figure. Please refer to Chapter 2 (Corrections and Modifications to the DEIS) of this document. The location of the Coulee Dam National Recreation Area is shown on Figure 3-13, page 3-117.
- B-8 The "Area with No Proposed Construction or Operation Activities" was established to avoid potentially sensitive environmental resources. With regard to the area outside of the of the no construction area, construction activities are only proposed in the area of the proposed facilities.
- B-9 See Supplemental Letter "B" Responses.
- B-10 The amount of water pumped and used by the Town of Creston varies annually and by season depending on the population and such factors as rainfall and temperature. In the past, the amount of water pumped has been substantially more than is currently being used. In 1979 the Town of Creston pumped an average of 120,000 gallons per day (gpd) to supply water service to 320 residences. Creston now supplies only about 240 residences. In 1993 Creston pumped 26,400,000 gallons (approximately 72,300 gallons per day). The NRPF's normal operating water requirements of 79,200 gpd to 100,800 gpd will increase the pumping amounts only slightly over the historically indicated amounts. These amounts are still substantially less than the amount of water rights certificates and claims held by the Town of Creston.

The Town of Creston is currently preparing a Capital Facilities Plan. Part of this plan will contain a study by Varela & Associates (Spokane, WA), addressing the

potential impact of Creston supplying water to the NRPF. This study is not yet available, but is reported to confirm the aquifers and the ability of Creston to supply the NRPF with water.

- B-11 Comment noted.
- B-12 Comment noted. However, it is assumed that Creston's water supply meets water quality standards for a potable water supply. To mitigate potential contamination in the recharging pond affecting local ground water quality, stormwater runoff near the exterior equipment and storage tanks will be routed through an oil and water separator prior to discharging to the collection channel.
- B-13 Comment noted. See page 3-51, Sensitive Animal Species, NRPF Site, which states "Based upon review of Washington State Department of Fish and Wildlife and U.S. Department of Fish and Wildlife databases, the bald eagle (*Haliaeetus leucocephalis*) and the peregrine falcon (*Falco peregrinus*) are noted as possibly occurring in the vicinity of the NRPF site."
- B-14 Comment noted. Suggested changes made to text. Please refer to Chapter 2 (Corrections and Modifications to the DEIS) of this document.
- B-15 Comment noted. Suggested changes made to text. Please refer to Chapter 2 (Corrections and Modifications to the DEIS) of this document.
- B-16 See response to comment B-5.

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## SUPPLEMENTAL LETTER 'B' RESPONSES

The air quality impacts of the Northwest Regional Power Facility (NRPf) are minimized by using the least-polluting fossil fuel and the best available air pollution control technology. The equipment which will be included in this project will have the latest proven combustion turbine technology. The NRPf will result in no unacceptable adverse impacts on air quality or to air quality-related values, including visibility, regional haze, plants and soils, and impacts on Class I areas. All applicable federal and state emissions control requirements were met.

Ambient air quality impacts were analyzed using standard methods developed by the Environmental Protection Agency (EPA). The air quality models used are defined in the Guideline on Air Quality Modeling (EPA, E1-25-78-027). Receptors were defined in a grid sufficient to cover the maximum impact areas for each pollutant, as well as to estimate ambient air concentrations in Class I areas.

The results of the analysis showed that the impacts from the proposed facility, together with background values, will not exceed the applicable primary or secondary ambient air quality standards. Model concentrations for the highest impacts from the facility alone are less than 2 percent of the standard. Similarly, impacts from the proposed facility alone will not exceed any Class II or Class I area PSD increments. Maximum PSD increments are less than 8 percent of the applicable PSD increments. Impacts from the proposed facility will not exceed any Washington Acceptable Source Impact Level (ASIL). Maximum impacts of air toxic compounds are less than 40 percent of the ASIL.

The Coulee Dam National Recreation Area (NRA) is a Class II area under PSD regulations. Impacts on Air Quality Related Values (AQRVs) for Class II areas are predicted by comparing modeled concentrations to the secondary ambient air quality standards which were established to protect public welfare. Impacts to air quality including the NRPf have been shown to be below the secondary ambient air quality standards for all pollutants.

An analysis of impacts of AQRVs in Class I areas was conducted for the proposed facility. A conservative method of analysis was used and included, as appropriate for each Class I area, impacts on soils, vegetation, visibility, water quality and fauna. Results of the analysis show that there were no adverse impacts projected on vegetation, soil, visibility, water quality or fauna in the mandatory Class I areas.

Specifically, an AQRV analysis was done for the Spokane Indian Reservation Class I area, located immediately adjacent to the Coulee Dam recreation area, at about 14 km to 20 km from the proposed NRPf site. The analysis included visibility and nitrate deposition. Methodologies used were conservative and established an estimated increase in nitrogen deposition of 1.7 percent, with no significant adverse impacts. The Spokane Indian Reservation is far more sensitive regarding fauna than Lake Roosevelt because of the existence of small ponds, with a high natural water acidity due to the pine forest, in comparison to the vast amount of water existing in Lake Roosevelt and its higher buffering capacity. Visibility analysis for the Spokane Indian Reservation Class I area used a Level 2 screening methodology. As a result of the analysis it was determined that during certain times of the year at sunrise or sunset hours, when the wind is blowing from the southwest and an observer is looking at the plume at a point approximately 14 km from the observer toward the project site, there would be some minor deterioration in visibility. This minor deterioration would not be a haze, but a potentially noticeable difference in color or contrast when viewing an object through the plume. It was determined that 6 percent of total hours

in a year were within the sunrise or sunset periods and had winds blowing from the southwest. If the total hours were further reduced by limiting those with greater than 50 percent cloud cover, visibility effects may be perceptible only 2.8 percent of the year. These visibility effects, if they exist, would be extremely minor and very difficult to perceive. The methodology used was very conservative and any potential impacts would not be significant.

The analysis of the effects on the Spokane Indian Reservation can easily be extrapolated to the Coulee Dam NRA without further modeling, to conclude that there would be no significant environmental impacts due to the nitrate deposition and visibility to the Class II air shed for the recreation area. However, further modeling was done at the request of the National Park Service (NPS) regarding the Class II air shed located over the Coulee Dam NRA.

Nitrogen Deposition. An evaluation of nitrogen deposition has been conducted following the procedures defined in the EPA document Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendations for Modeling Long Range Transport and Impacts on Regional Visibility (EPA-454/R-93-015, April 1993). The analysis calls for the use of the annual average NO<sub>2</sub> concentration at 50 km from the project. Since the closest distance to 50 km for which ISC modeling results were available from the previous analysis was 8.3 km, this concentration was used for the nitrogen deposition analysis. The concentration at that distance was conservatively converted to a nitrogen deposition rate of 0.55 kilograms/hectare/year, using a molecular weight ratio of 0.304 and a dry deposition velocity of 2.5 cm/s. At 50 km, the nitrogen deposition rate is expected to be significantly lower due to continued dispersion of the plume over that distance. The Coulee Dam NRA encompasses Lake Roosevelt, which contains a tremendous volume of water. Considering this large water volume together with the buffering capacity from the highly alkaline soils of the area, this nitrogen deposition would be insignificant. A calculation sheet presenting the details of the analysis is attached.

Plume Visibility Analysis. A plume visibility analysis has been conducted for the Coulee Dam NRA using procedures defined in the EPA document Workbook for Plume Visual Screening and Analysis (EPA-450/4-88-015). Nitrogen oxide and particulate emissions from the proposed turbines were used in the analysis. Impacts were evaluated for receptors "inside" the NRA following the procedures defined in the above-referenced document.

In this analysis (using conservative analyses regarding wind speed and air stability), the maximum delta E was found to be 9.9 located at the closest point within the NRA, approximately 10 km from the NRPF. Although the plume from the NRPF is not visible, there would theoretically be a slight change in the color of the blue sky viewed through the plume. The plume would be visible in approximately 1 degree of the horizon, which is about twice the apparent width of the sun. This condition could occur only during times when winds are carrying the plume from the NRPF to the NRA. An evaluation of the meteorological data from the Spokane airport shows that these conditions occurred 44 percent of daylight hours in 1982. Since clouds and precipitation would obscure the plume and diminish overall visibility, periods of cloudiness and precipitation were examined. Further evaluation of the Spokane airport data for 1982 shows that winds from the appropriate direction occurred without precipitation 38 percent of the daylight hours during the year. Still further evaluation of the Spokane airport data shows that the winds from the appropriate direction occur without precipitation or cloudiness 4 percent of the daylight hours in the year.

Using these conservative assumptions, a slight change in the color blue, the width of an index finger held up at arms' length (1 degree), might be observed by one purposefully looking for it. This would occur only 4 percent of the yearly daylight hours, and would not likely be seen by a casual observer. Based on this information, plume visibility in the NRA is not expected to be adversely impacted by the NRPF.



SUBJECT \_\_\_\_\_

BY JE DATE 5/22/96

SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_

PROJECT NO. \_\_\_\_\_

Northwest Regional Power Facility  
 Nitrogen Deposition Analysis  
 Conlee Dam National Recreation Area

Annual  $\text{NO}_x$  Concentration at farthest distance  
 available

$$= 0.23 \mu\text{g}/\text{m}^3 \text{ (@ } 8.3 \text{ km)}$$

molecular weight of  $\text{N} = 14$ ,  $\text{NO}_2 = 46$

$$\frac{0.23 \mu\text{g}}{\text{m}^3} \text{ NO}_2 \times \frac{14}{46} = \frac{0.07 \mu\text{g}}{\text{m}^3} \text{ N}$$

$$\frac{0.07 \mu\text{g}}{\text{m}^3} \text{ N} \times \frac{3.1536 \times 10^7 \text{ seconds}}{\text{year}}$$

$$= 2,207,520 \mu\text{g}/\text{m}^3 \text{ seconds/year}$$

Deposition velocity = mid point of ranges in literature  
 $= 0.025 \text{ m/s}$

$$\text{N deposition} = \frac{2,207,520 \mu\text{g}}{\text{m}^3} \frac{\text{seconds}}{\text{year}} \times \frac{0.025 \text{ m}}{\text{s}}$$

$$= 55,188 \mu\text{g}/\text{m}^2/\text{year}$$

$$= 0.55 \text{ kg}/\text{ha}/\text{year}$$



# LETTER "C"

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, Washington 98101

REPLY TO  
ATTN OF: WD-126

JAN 10 1996

Nancy Wittpen  
Bonneville Power Administration  
905 NE 11th Avenue  
Portland, Oregon 97232

Re: Bonneville Power Administration's (BPA) Northwest  
Regional Power Facility Draft Environmental Impact  
Statement (EIS), Creston, Washington.

Dear Ms. Wittpen:

The Environmental Protection Agency (EPA) has reviewed the draft EIS for BPA's Northwest Regional Power Facility. Our review was conducted in accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act. We appreciate the opportunity to review this project and provide comments at this time.

The proposed power facility is a natural gas-fired, generating plant with output of 838 megawatts. This draft EIS addresses the Proposed Action and No Action, and briefly discusses alternatives eliminated from consideration.

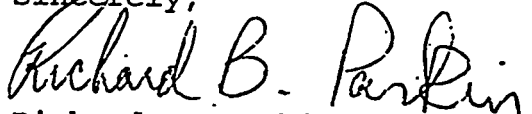
Based on our review, we have rated the draft EIS EC-2 (Environmental Concerns, Insufficient Information). Our review has identified environmental impacts from the proposed action. Our environmental concerns are based on: anticipated negative impacts to water quality, wetlands and air quality. 1

Additional information is requested to: strengthen the alternatives analysis; clarify proposed mitigation measures for wetlands and water quality impacts; clarify air quality impacts; and fully evaluate cumulative impacts.

An explanation of our rating system for draft EISs is enclosed for your reference. This rating and a summary of our comments will be published in the Federal Register.

If you have any questions about our comments (enclosed), you may contact Larry Brockman in Seattle at (206) 553-1750. We appreciate this opportunity to review and comment on the draft EIS.

Sincerely,

A handwritten signature in cursive script that reads "Richard B. Parkin". The signature is written in dark ink and is positioned above the printed name and title.

Richard B. Parkin, Manager  
Geographic Implementation Unit,  
Office of Ecosystems & Communities

Enclosure

cc: Federal Energy Regulatory Commission - Cashell  
EFSEC - Jason Zeller

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)  
COMMENTS REGARDING  
BPA'S NORTHWEST REGIONAL POWER FACILITY  
ENVIRONMENTAL IMPACT STATEMENT

Alternatives Analysis

EPA is concerned that alternative locations for the construction and operation of the proposed power facility have not been sufficiently analyzed. Specifically, EPA believes the draft EIS should evaluate alternatives that reduce the need for such an extensive natural gas pipeline. Presently, the alternative pipeline routes evaluated in the EIS range from 58 miles to 70 miles. The preferred routing of the pipeline will cross 14,800 feet of wetlands, cross eight sensitive fish bearing streams, five perennial streams, and fifty-eight ephemeral streams. It will cross eight other sensitive biological habitats and sixty four state or federal highways. It will impact one hundred and seventy-five private property owners.

The EIS must include within its scope an evaluation of impacts, direct and indirect and effects and alternatives to the proposed action in accordance with 40 CFR 1502.14 and 1502.15. Consideration of effects include taking a hard look at the effects of transporting natural gas supplies to the facility.

The EIS must evaluate reasonable alternatives. CEQs Forty Questions states, that reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant. Consideration of reasonable alternatives would necessarily include alternate sites that may obviate the need for construction of lengthy pipelines.

EPA is concerned BPA has limited its alternatives analysis solely to the action alternatives proposed by the applicant. The draft EIS indicates, the applicant evaluated two types of alternatives: sites in Washington state in general and sites near the town of Creston, Washington. A siting analysis was completed by Washington Water Power Company in the late 1970's and early 1980s for a coal-fired plant in Creston, Washington. The applicant determined that eastern Washington, specifically the Creston area would be more suitable than western Washington.

According to the draft EIS, the applicant believed this coal-fired plant location near Creston, would also be appropriate for a smaller, more environmentally benign gas fired power plant. This may be true, however, the coal fire plant did not include an extensive gas pipeline. In conclusion, BPA's draft EIS analyzes sites considered appropriate for a coal-fired plant near Creston and evaluates which side of the cascade mountains the facility

should be built on. Given this limited analyses, EPA believes BPA has not met its obligations under 40 CFR 1502.14.

Those obligations include evaluation of the impacts of a 50-60 mile pipeline and the potential for mitigating those impacts by locating the plant nearer to the existing Pacific Gas Transmission (PGT) pipeline. To ensure a full and fair environmental review EPA recommends that BPA work with the Federal Energy Regulatory Commission (FERC); as describe below, to determine a lead agency and include an expanded alternative analyses in any subsequent NEPA document.

2

#### FERC/BPA Coordination

The BPA and the FERC have complimentary roles in this project. BPA will decide whether to construct and operate transmission facilities and FERC will decide whether to approve construction of the natural gas pipeline from PGT's pipeline near Spokane, Washington to BPA's preferred alternative. Presently, the NEPA requirements for this project are being addressed separately by the two agencies. The BPA does not evaluate alternative project sites to determine if reducing the length of the pipeline is feasible. Further, we have no indication that FERC plans to address that issue.

EPA believes the project proposal requires the designation of a lead agency (either BPA or FERC) because more than one federal agency is involved in what must be considered either the "same action" or "a group of actions directly related to each other because of their functional interdependence" 40 CFR 1501.5. If not the same action, BPA and FERC actions are, at the very least, functionally interdependent because the power facility under consideration would be useless if its power cannot be transmitted via BPA lines or if it cannot obtain natural gas via a FERC-license pipeline.

3

Having each agency conduct separate environmental reviews will result in improperly segmented consideration of environmental impacts and failure to explore viable alternatives that would mitigate impacts. Furthermore, according to the Council on Environmental Quality's (CEQ), Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act (NEPA) Regulations "Forty Questions," an alternative that is outside the legal jurisdiction of the lead agency must still be analyzed in the EIS if it is reasonable (see also 40 CFR 1502.14).

Once a lead agency has been identified, it must conduct the appropriate scoping in accordance with 40 CFR 1501.7, which includes among other things, determining the appropriate scope of the EIS. CEQ's Forty Questions states, agencies must integrate the NEPA process into other planning at the earliest time

possible. Also the federal agencies that are likely to become involved should then be contacted and then the NEPA process coordinated to insure an early and comprehensive analysis.

3

#### Wetlands/Waters of the U.S.

As mentioned in our scoping comment letter dated June, 16, 1995, wetlands are one of a number of "Special Aquatic Sites" referenced in the CWA section 404(b)(1) Guidelines. These Guidelines provide the substantive environmental criteria for protecting waters of the U.S. under section 404 of the CWA. Wetlands are significant environmental resources that provide a wide range of important functions and values. They have experienced severe cumulative losses nationally. For these reasons protection of wetlands and other important aquatic resource habitats is a high EPA priority.

For purposes of section 404 permits where dredge or fill activity is proposed in waters of the U.S., all aquatic resource areas, including wetlands, should be clearly identified and assessed in relation to project affects. Presently the draft EIS does not clearly show the location of the wetlands likely to be affected. The final EIS should include maps outlining the location of the wetlands and the routing of roads, pipelines or facilities impacting wetlands. Specifically, wetlands in the project area should first be identified and delineated consistent with the Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, January 1987, Final Report and its recent guidance on implementation. Delineation should be followed by a functional assessment to determine the extent and importance of existing wetland and aquatic resources. Several options such as the Wetland Evaluation Technique are available for use in determining wetland and associated aquatic resources functions and their values. Any special features such as rare or unique habitats should receive special attention.

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Once the wetland functions and values are defined, the possibilities for mitigating potential effects can be explored. Planning and design should seek to avoid adverse effects wherever possible, to minimize adverse effects which are unavoidable, and, as a final alternative, to provide adequate compensation for all unavoidable adverse effects. This will require a thorough evaluation of all less environmentally damaging project alternatives. For non-water dependent activities, such as roads, alternatives to siting in wetlands are presumed to be available unless demonstrated otherwise. The 404(b)(1) Guidelines and EPA Wetland Specialists should be consulted for specific guidance on the scope of avoidance and minimization alternatives that need to be addressed.

We recommend coordination with the appropriate Corps District, EPA Aquatic Resource Unit, Fish and Wildlife Service,

National Marine Fisheries Service and other state and federal resource agencies when developing alternatives to determine whether effects on to waters of the United States can be eliminated or reduced. If it is determined an individual 404 permit is required, the need to select alternatives which avoid effects on U.S. waters must be addressed during the 404 permit process. To assure consistency with the 404(b)(1) Guidelines, a thorough analysis of all possible alternatives to avoid and minimize wetland and aquatic resource habitat impacts should be addressed through the NEPA EIS process. These alternatives can include project design changes including pipeline alignment reconfiguration and alternate pipeline water crossings (i.e., tunneling, bridging).

The final EIS needs to discuss alternatives to avoid and minimize wetland or other aquatic resource habitat effects. If the final EIS does not fully address all less environmentally damaging alternatives, it is conceivable that a supplemental EIS may be necessary.

We suggest BPA meet with resource agencies, including EPA, to discuss mitigation options. To coordinate the wetland and aquatic resource impact aspects of this project, please contact Richard Clark, Wetlands Specialist, at (206) 553-5198 in the Seattle Regional EPA office.

#### Air Quality

In general, it is difficult to determine the adequacy of the air quality analyses due to the lack of sufficient explanation/documentation of the information and methodologies used to characterize current and future conditions in the area likely to be impacted by air emissions from the proposed project. For example, Section 3.1.3.2 presents projected air quality impacts from the proposed facility with essentially no explanation of the methodologies employed or the sources of data used in the analyses. We are aware that a PSD application has been prepared for the project and submitted to EFSEC, yet the draft EIS does not reference the application or include enough information from the permit application (which we assume is the basis for the results presented in the draft EIS) to allow the reviewer to understand the level of analysis the project has undergone. We recommend that the EIS be revised to include documentation of the analyses conducted and the data sources used in the development of the climate and air quality sections. This should include complete citations of all applicable reference materials as well as the documentation of estimated project emissions and the dispersion modeling analyses.

The draft EIS presents impacts on the Spokane Indian Reservation (a Class I area), including impacts to air quality related values (AQRVs) such as visibility, vegetation, flora and

fauna, water quality, etc. The identification of the relevant AQRVs and an understanding of what could be judged as acceptable degradation (or if any degradation is acceptable at all) should be done in close consultation with the Spokane Tribe of Indians. Based on the information presented in the EIS, it appears that the evaluation of AQRV impacts on the Spokane Reservation has not been conducted in consultation with the Spokane Tribe and therefore it is not clear that they are either relevant or important to the Tribe. We recommend that KVA/BPA work closely with the Tribe to ensure that impacts to those resources that are important are identified and evaluated with the necessary level of rigor to ensure that they receive the appropriate levels of protection. The results of this effort should be reflected in the final EIS.

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We had some difficulty determining the precise distance between the project site and the Spokane Reservation. For example, the table presented on page 3-27 indicates that the Reservation is 15 miles from the project site while Figure 2-6 suggests that the distance is roughly nine (9) miles. Such discrepancies may have implications on model-predicted air quality impacts on the Reservation. We recommend that KVA/BPA verify the distance between the site and the Reservation and ensure that the correct distance is reflected in the air modeling analyses.

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#### Specific Comments

The draft EIS briefly describes historical meteorological monitoring (Section 3.1.2.1) and ambient air quality monitoring (Section 3.1.3.1) efforts conducted between 1979 and 1981. Because no maps were included in the draft EIS indicating the locations where this monitoring was conducted relative to the proposed project site, it is difficult to determine how the meteorological and ambient air measurements relate to the EIS analysis. We recommend that the EIS be revised to include a map (or maps) indicating where historical monitoring has been conducted in relation to the project location.

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Section 3.1.2 presents a discussion related to fog. A discussion of the frequency of heavy fog events in Spokane is presented and is subsequently followed by a brief discussion that indicates the project is not expected to significantly impact local weather or climate. First, it is unclear how the information regarding fog in Spokane relates to conditions in the vicinity of the proposed project site. Second, it is not clear that the potential impact of the project on the frequency of fog in the vicinity of the site has really been evaluated. With the location of the evaporation ponds being close to Lincoln Road and Highway 2, there is the potential for enhanced fog formation near these roadways and the safety issues associated with fog formation. We recommend that the draft EIS be revised to clarify

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the likelihood of the project to create roadway safety hazards associated with enhanced fog formation.

Section 3.1.3.1 presents a characterization of background air quality levels in the vicinity of the site using data collected in 1980-81. While, in general, the values presented in the draft EIS are probably reasonable indicators of conditions in the vicinity of the proposed project site, we recommend that the discussion be expanded with respect to  $PM_{10}$  levels throughout eastern Washington. To summarize, eastern Washington (including the project site) frequently experiences large dust storms with resulting  $PM_{10}$  levels well above the applicable ambient standards. Current planning efforts are underway to gain a better understanding of the source areas (primarily agricultural activities) with the intent of developing a strategy for reducing the occurrence/severity of these events. While we do not view the project to be a significant  $PM_{10}$  source, we do not feel that current particulate matter levels in the vicinity of the project site are completely described by the values presented in Table 3.1.

We would like to clarify that the designation of the Spokane  $PM_{10}$  nonattainment area is not attributable exclusively to agricultural activities. Emissions from roadways and woodstoves have been identified, in addition to agricultural sources, as significant contributors to the  $PM_{10}$  problem in Spokane.

The draft EIS states that the Notice of Construction and supporting documentation are contained in Appendix E. Unfortunately, we were unable to locate this information. We recommend that the EIS be revised to include this information.

Pages 3-29 and 3-30 present an extremely brief overview of the modeling analyses conducted. We believe that this discussion needs to be expanded considerably in order for all interested parties to fully understand the nature and extent of analyses performed (for air quality modeling analyses, details are important). Key elements that warrant discussion include:

- Emissions estimation methodologies
- Identification of sources and release parameters (stack height, etc.)
- Identification of meteorological data sets used (and the justification for their use)
- Receptor deployment (spatial resolution, treatment in terrain)

The description of the PSD increment contained in the draft EIS is incorrect. It is not the allowable increase in concentration above background levels. A PSD increment is the maximum allowable increase in concentration above a baseline concentration for each pollutant. A baseline concentration is,

in general, the ambient concentration existing at the time that the first complete PSD permit affecting the area is submitted.

A footnote appears to be missing from Table 3.5.

The screening assessment of visibility impacts indicates that the potential for impacts to the visibility resource on the Spokane Reservation exists. The discussion concludes that conditions conducive to visibility impairment occur at a rate of 2.8 hours per year, yet does not provide any conclusions as to the significance of this condition. As we indicated above, we recommend that KVA/BPA consult with the Spokane Tribe to ensure that visibility impacts are maintained at acceptable levels for the Class I area that they maintain.

The air quality section presents no assessment of potential air quality impacts associated with the construction of the facility. We recommend that emissions from construction activities be quantified and included in the EIS.

The draft EIS states that corona, ozone, and oxides of nitrogen are released in quantities too small to measure or have any significant effects. We recommend that the draft EIS provide the appropriate literature citation to support such a conclusion.

#### Cumulative Impacts

Cumulative impacts are defined as "...the impact on the environment which results from the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions." (40 CFR 1508.7)

The draft EIS does not discuss cumulative impacts to water quality and wetlands. The final EIS should include an analysis on cumulative impacts for these resources. For any resource, the cumulative impact evaluation must begin with an assessment of the degree to which impacts have already occurred. Such a baseline assessment is critical to the ability to ascribe significance to any amount of further impact. For cumulative effects in particular, the magnitude of impact may not be synonymous with the significance of that impact. A minor impact could be significant. The purpose of a cumulative impacts analysis should be to determine the relationship between these concepts.

At a minimum the EIS should discuss how this project will impact the waterways, area wetlands, fish and wildlife resources cumulatively with other past, ongoing and reasonably foreseeable future development.

## LETTER "C" RESPONSES

- C-1 Comment noted.
- C-2 The need for a project defines the alternatives.

The underlying need for federal action on this project is to respond to a request from KVA Resources to provide integration and wheeling services for the output of the NRPF. The alternatives to meeting this need to respond are either to say yes (the proposed action), no (the no action alternative), or offer alternative ways to integrate or wheel over the system. For Bonneville's purposes, the EIS must analyze the impacts of the integration and wheeling because they are direct federal actions, and must analyze the facility itself because it is a connected action.

However, Bonneville is not a regulatory agency and cannot tell developers where or what type of generation facilities to build.

NEPA and its defining regulations oblige federal agencies to discuss only alternatives that are reasonable. 40 CFR §§ 1502.14(a) and (c), 1508.25(b)(2); see also, Forty Most asked Questions Concerning CEQ's NEPA Regulations, 46 Fed. Reg. 18,026, 18,027 (March 23, 1981). Recognizing that "reasonable" is not self-defining, now Supreme Court Justice Clarence Thomas, in Citizens Against Burlington, Inc. v. Busey, 938 F. 2d 190 (D.C. Cir. 1991), cert. denied, 112 S.Ct. 616 (1991), provided some clarity, as follows:

NEPA plainly refers to alternatives to the "major Federal actions significantly affecting the quality of the human environment," and not to alternatives to the applicant's proposal. NEPA 102(2)(C), 42 USC § 4332(2)(C) [emphasis in original]. An agency cannot redefine the goals of the proposal that arouses the call for action; it must evaluate alternative ways of achieving its goals [emphasis in original] ... Congress did not expect agencies to determine for the applicant what the goals of the applicant's proposal should be.

Id. at 199.

This approach in the EIS is also consistent with Section 10 of BPA's enabling legislation, the Pacific Northwest Electric Power Planning and Conservation Act 16 USC §§ 839 et seq., as follows:

Nothing in this Act shall be construed to affect or modify any right of any State of political subdivision thereof or electric utility to ... make energy facility siting decisions, including, but not limited to, determining the need for a particular facility, evaluating alternative sites, and considering alternative methods of meeting the determined need.

16 USC § 839g.

Accordingly, with regard to the NRPF as a whole, BPA believes that it is appropriate to limit our examination of overall alternatives to the proposed action and the no action alternative.

- C-3 BPA will decide whether to construct and operate transmission facilities and FERC will decide whether to approve construction of the natural gas pipeline from PGT's pipeline near Spokane, WA to the facility. Building a natural gas pipeline is recognized as a connected action and "functionally interdependent." BPA and FERC would have preferred to analyze impacts of the facility, transmission, and pipeline in one EIS. That was impossible because site-specific pipeline information was not available at the time KVA submitted a site application to EFSEC for the facility and contacted BPA. PGT had not yet submitted an application to FERC for the pipeline. Without an application, FERC could not begin and conduct an environmental review. As a result, two EISs will be done; the first one focusing on the facility and transmission, the second one focusing on the pipeline.

FERC is a cooperating agency in this EIS. All gas pipeline information that was available at the time was added to this EIS. When an application for the gas pipeline is submitted, FERC will conduct a NEPA review of its potential impacts. BPA plans to be a cooperating agency in FERC's gas pipeline review and the environmental impacts associated with the gas pipeline will be considered by BPA before making a final decision on the project after FERC's analysis is complete. As a result, no decision is made by BPA until all environmental aspects of the facility, transmission, and the pipeline are identified and considered. Supplemental environmental review will be done on the impacts of wheeling power over the transmission line when customers of KVA are identified.

- C-4 The proposed project is in compliance with Executive Order 11990 which mandates that federal agencies such as the BPA and FERC ensure that the destruction, loss or degradation of wetlands be minimized when conducting regulatory or licensing activities. The project has taken all practicable measures to avoid and minimize wetland impacts. These avoidance and minimization measures are described in Chapter 3 (Affected Environment, Impacts and Mitigating Measures), Section 3.1.6.3 (Mitigating Measures). Standard mitigations for wetlands include conditions required for Nationwide Permits (NWP) under the Clean Water Act Section 404 and NPDES requirements under Clean Water Act Section 402.

BPA has taken all practicable measures to avoid and minimize wetland impacts at this stage in the transmission line design process. BPA anticipates that wood pole removal and construction of new towers will not impact any wetlands. Based on access road design assumptions, BPA has identified four wetlands that may be affected by access road widening. Detailed access road design work will be done before construction. Road widening and positioning will be coordinated with a BPA wetland specialist. BPA will try to avoid impacts to these four wetlands by considering road design alternatives. At this time, BPA anticipates that activities potentially affecting these wetlands can be authorized by Nationwide Permits 14, 25, and 33. This will be confirmed when the amount of fill and extent of impacts are determined. BPA will then notify the appropriate agencies. Permit requirements will be followed.

- C-5 It is acknowledged that detailed development of analyses was not included in the DEIS. The DEIS was prepared on the basis of information included in the PSD application. The DEIS sections on air quality were intended to focus on a description of the impact analysis results, rather than the methods. The final EIS will incorporate by reference the PSD application.
- C-6 Comment noted. Several consultations regarding air quality impacts have been held between the applicant and the Spokane Tribe.

- C-7 The closest distance from the facility to the Spokane Reservation used in the visibility screening analysis is 22 km (13.64 miles).
- C-8 See Response to Comment C-5.
- C-9 Section 3.1.2.1 describes the existing climatic conditions for the project. The evaporation ponds are not expected to increase localized fog.
- C-10 Comment noted. However, Table 3.1 is intended to reflect the assumed background concentrations of pollutants for the vicinity of the project.
- C-11 Comment noted.
- C-12 The Notice of Construction is contained in Appendix E, the background information is included in the PSD application. The final EIS will incorporate by reference the PSD application.
- C-13 See Response to Comment C-5.
- C-14 Comment noted.
- C-15 Comment noted. Table 3.5 has been revised. Please refer to Chapter 2 (Corrections and Modifications to the DEIS) of this document.
- C-16 The impacts upon visibility were derived from the conservative assumptions. Some impact may be visible under proper lighting situations if one were looking toward the plant site and visibility was not obstructed by land forms. If one knew where to look, a slight distortion might be detectable. Most of the recreation on or along the rivers occurs at locations where hills will obstruct this view. The impact, if it occurs, should not be noticeable to recreational visitors. The impact to visibility is only a possibility, and, if it occurs, it should not be significant. Several consultations regarding air quality impacts have been held between the applicant and the Spokane Tribe. In addition, see Supplemental Letter "B" Responses.
- C-17 As stated on page 3-34, Unavoidable Adverse Impacts, "Other emissions related to development and operation of the NRPF include construction activities, construction traffic automotive emissions, materials storage and handling, etc." Impacts would be mitigated with the implementation of standard construction practices, including:
- (1) Construction equipment operators shall shut off equipment when not in use to avoid unnecessary idling. As a general rule, vehicle idling should be kept below 10 minutes.
  - (2) The contractor's construction equipment shall be properly maintained and in good operating condition.
  - (3) During summer morning hours, when smog accumulates, the construction period shall be lengthened so as to minimize the number of vehicles and equipment operating at the same time.
  - (4) The contractor shall utilize new technologies to control ozone precursor emissions as they become available and feasible.